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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,381	07/01/2005	Akitoshi Yamada	00862.023429	6303

5514 7590 01/05/2007

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EXAMINER	
HENN, TIMOTHY J	
ART UNIT	PAPER NUMBER
2622	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/541,381	YAMADA ET AL.	
	Examiner	Art Unit	
	Timothy J. Henn	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 November 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *14-21,24-27 and 31-43* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *14-21,24-27 and 31-43* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 July 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 27 November 2006 have been fully considered but they are not persuasive. In the response filed Applicant argues that the ack_busy is a response corresponding to a predetermined command. However, the examiner notes that as claimed, a command "corresponding to the predetermined command" is not specifically defined. As described in Niida, the ack_busy response is used to inform a communication partner about a device's status. If the device is busy, the ack_busy response will be sent regardless of what command is originally sent to the device. If the device is not busy, the proper response to the originally sent command (i.e. a response corresponding to the predetermined command) will be sent to the communication partner (e.g. Figure 12; ACCEPTED RESONSE, ACKNOWLEDGE PACKET, RESPONSE RECEIVED). Since the ack_busy response corresponds to the state of the device receiving the command (i.e. whether to send ack_busy is determined by the device's current state, not the specific command sent to the device), ack_busy can not correspond to the command issued by the command issuing means as argued by Applicant.

Niida further discloses that by using the disclosed communication system more secure communication can be assured, a busy state of the destination node is prevented from occurring frequently and deadlock can be prevented (Paragraph 0223), therefore it is submitted that there exists proper motivation to use the communication

system described in Niida in the system of Tanaka. Therefore, the rejections based on Niida and Tanaka are maintained.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 14-17, 24-27 and 31-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Niida et al. (EP 0938218 A2).

[claim 14]

Regarding claim 14, Niida discloses an image supply device used in a recording system in which the image supply device and a recording apparatus communicate with each other via a communication interface, and image data is transmitted from the image supply device to the recording apparatus and recorded (Figure 1) comprising: command issuing means for issuing a predetermined command to the recording apparatus (Figure 1, Item 109; Figures 4A-4C); reception means for receiving a signal from the recording apparatus after said command issuing means issues the predetermined command (Figure 1, Item 109; Figures 4A-4C); determining means for determining whether the reception means receives a command other than a response corresponding to the predetermined command prior to a reception of the response (i.e. receiving a proper reply) and control means for controlling an issuing timing of a next command to the recording apparatus in a case where said determination means determines that the reception means has received the command other than the response prior to a

reception of the response (Figure 11; Paragraphs 0195-0223).

[claim 15]

Regarding claim 15, Niida discloses a control means which delays the issuing timing of the next command by a predetermined time period (Figure 11; Paragraphs 0195-0223).

[claim 16]

Regarding claim 16, Niida discloses changing the reply period depending on whether an error has occurred in transmission. The examiner notes that since errors randomly occur in transmissions, the time period will be randomly changed (i.e. immediately sending the next command or waiting a time period if an error occurs).

[claim 17]

Regarding claim 17, Niida discloses waiting a time period whenever an error occurs in transmission (i.e. the signal is not the response corresponding to the predetermined command). Every time an error occurs, the time period starts over (i.e. is updated) and the system waits for the time period to expire prior to sending the next command (i.e. retrying; Figure 11, Paragraphs 0195-0223).

[claims 24-27]

Claims 24-27 are method claims corresponding to apparatus claims 14-17. Therefore, claims 24-27 are analyzed and rejected as previously discussed with respect to claims 14-17.

[claims 31-34]

Claims 31-34 are method claims corresponding to apparatus claims 14-17. Therefore, claims 31-34 are analyzed and rejected as previously discussed with respect to claims 14-17.

[claims 39, 41 and 42]

Regarding claims 39, 41 and 42, Niida does not disclose any step of storing the received response, therefore, the response (whether it is a corresponding response or response other than the corresponding response) will be discarded as claimed.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 18-21, 24-27 and 35-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al. (US 2001/0048534 A1) in view of Niida et al. (EP 0938218 A2).

[claim 18]

Regarding claim 18, Tanaka discloses a recording apparatus used in a recording system in which an image supply device and the recording apparatus communicate with each other via a communication interface, and image data is transmitted form the image supply device to the recording apparatus and recorded (Figure 1), comprising: command issuing means for issuing a predetermined command to the image supply device (Figure 5, Item 136; Figure 8) and reception means for receiving a signal from the image supply device after the command issuing means issues the predetermined

command (Figure 5, Item 136; Figure 8). However, Tanaka does not disclose a determination means or control means as claimed.

Niida discloses a communication system including a determining means for determining whether the reception means receives a command other than a response corresponding to the predetermined command prior to a reception of the response (i.e. receiving a proper reply) and control means for controlling an issuing timing of a next command to the recording apparatus in a case where said determination means determines that the reception means has received the command other than the response prior to a reception of the response (Figure 11; Paragraphs 0195-0223). Niida further discloses that by implementing the disclosed communication system more secure communication can be assured, a busy state of the destination node is prevented from occurring frequently and a deadlock can be prevented (Paragraph 0223). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement a determination means and control means as disclosed by Niida in the system of Tanaka to assure secure communication and prevent a frequent busy state of the destination node and deadlock.

[claim 19]

Regarding claim 19, Niida discloses a control means which delays the issuing timing of the next command by a predetermined time period (Figure 11; Paragraphs 0195-0223).

[claim 20]

Regarding claim 20, Niida discloses changing the reply period depending on whether an error has occurred in transmission. The examiner notes that since errors randomly occur in transmissions, the time period will be randomly changed (i.e. immediately sending the next command or waiting a time period if an error occurs).

[claim 21]

Regarding claim 21, Niida discloses waiting a time period whenever an error occurs in transmission (i.e. the signal is not the response corresponding to the predetermined command). Every time an error occurs, the time period starts over (i.e. is updated) and the system waits for the time period to expire prior to sending the next command (i.e. retrying; Figure 11, Paragraphs 0195-0223).

[claims 24-27]

Claims 24-27 are method claims corresponding to apparatus claims 18-21. Therefore, claims 24-27 are analyzed and rejected as previously discussed with respect to claims 18-21.

[claims 35-38]

Claims 35-38 are method claims corresponding to apparatus claims 18-21. Therefore, claims 35-38 are analyzed and rejected as previously discussed with respect to claims 18-21.

[claim 40 and 43]

Regarding claims 40 and 43, Niida does not disclose any step of storing the received response, therefore, the response (whether it is a corresponding response or response other than the corresponding response) will be discarded as claimed.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Henn whose telephone number is (571) 272-7310. The examiner can normally be reached on M-F 9:00 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on (571) 272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TJH
12/7/2006

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